

New Species of *Enkianthus*.

BY

WILLIAM GRANT CRAIB, M.A.,

Lecturer on Forest Botany and Indian Forest Trees
in the University of Edinburgh.

THE species described in this paper are :—

- Enkianthus ferrugineus*, Craib, p. 155.
- Enkianthus latiflorus*, Craib, p. 156.
- Enkianthus Palibinii*, Craib, p. 157.
- Enkianthus pallidiflorus*, Craib, p. 157.
- Enkianthus pendulus*, Craib, p. 158.
- Enkianthus recurvus*, Craib, p. 159.
- Enkianthus sinohimalaicus*, Craib, p. 160.
- Enkianthus sulcatus*, Craib, p. 160.
- Enkianthus tectus*, Craib, p. 161.

Enkianthus ferrugineus, Craib, sp. n.

Ramuli saepe verticillati, juventute plus minusve rubescentes, angulati, elongati folia saepissime distincte opposita vel subopposita, breves folia rosulata gerentes. Folia obovato-rhomboida, rhomboidea vel plus minusve elliptica, apice rotundata obtusave, brevissime mucronulata, basi cuneata vel late cuneata, ad 3.5 cm. longa et 2.3 cm. lata, chartacea, supra viridia, primo ad costam nervosque laterales pilis perpaucis instructa, mox fere glabra, subtus pallidiora, ad costae nervorumque lateralium partes basales ferrugineo-pilosa, aliter pilis brevibus ferrugineis adpressis inconspicuis tecta, nervis lateralibus utrinque 3-5 cum costa supra impressis subtus prominentibus intra marginem anastomosantibus, nervis transversis rete laxum subtus conspicuum efficientibus, margine arcte anguste crenulato-serrata, petiolo ad 7 mm. longo supra canaliculato laminae decurrente anguste alato mox fere glabro suffulta. Flores cum foliis coaetanei, in racemos breves corymbiformes dispositi, bracteis inferioribus foliaceis, pedicellis circa 1 cm. longis superne incrassatis suffulti, rhachi pedicellisque pilis brunneis tenuibus laxe tectis. Calycis segmenta lineari-lanceolata, acuta obtusave, 3.5 mm. longa, 1-1.25 mm. lata, extra inferne indumento ei pedicellorum simili tecta, intra glabra, margine distanter ciliata,

nervis obscuris. Corolla campanulata, circa 6 mm. longa, ad medium 5-lobata, lobis mox patulis apice rotundatis papilloso-ciliolatis. Stamina generis; filamenta 2-2.5 mm. longa, papilloso-puberula, antheris vix 1 mm. longis, aristis 0.5-0.75 mm. longis cum antheris papillosis. Pistillum glabrum, ovario 2 mm. alto, stylo 3 mm. longo.

Cult. Hort. Bot. Reg. Edin. Hab. Japan.

In this species the flowers appear along with the leaves instead of just after the leaves as in the others. The shape of the leaves and the short, inconspicuous, adpressed hairs on their lower surface serve to distinguish the species vegetatively.

Enkianthus latiflorus, Craib, sp. n.

Ramuli saepissime verticillati, juniores virides vel plus minusve rubescentes, glabri nisi ad foliorum insertionem paucipilosi; latere utroque conspicue angulati, breves folia aggregata, elongati folia alterna vel subalterna gerentes. Folia oblongo-oblancheolata vel obovato-oblancheolata, apice breviter acuminata, summo apice costa excurrente conspicue apiculata, basi cuneata vel late cuneata, usque ad 4.4 cm. longa et 2.5 cm. lata, rigide chartacea, supra viridia, ad costam nervosque pilis paucis breviusculis erectis instructa, subtus pallidiora, superne glabra, inferne praesertim in axillis sparse pilosa, pilis mox brunnescentibus, nervis lateralibus utrinque 4-6 intra marginem anastomosantibus, costa subtus prominente, margine argute haud alte serrulata, serrulis pilis mox evanidis apiculatis; petioli ad 1 cm. longi, supra conspicue canaliculati, superne latere utroque anguste alati, glabri. Flores in racemos mediocres sessiles dispositi, inferiores in axillis foliorum rosulae superiorum positi, rhachi ad 3 cm. longa, pedicellis ad 1.7 cm. longis cum rhachi sparse brunneo-pilosis praeterea albo-puberulis; bracteae bracteolaeque parvae, mox deciduae. Calyx 3.5 mm. longus, segmentis deltoideo-lanceolatis vel oblongo-lanceolatis apice nervo mediano excurrente apiculatis 3 mm. longis 1.5 mm. latis indumento specierum aliarum tectis. Corolla ad 1 cm. longa et diametro, lobis rotundatis breviter apiculatis dorso apicem versus carinatis vix reflexis. Stamina generis; filamenta circa 2.5 mm. longa; antherae vix 1.25 mm. longae, sparse setulosae, superne parum ampliatae, aristis 1.5 mm. longis papillosis. Pistillum glabrum; ovarium cum disco pallidiore 2.5 mm. altum, pallide viride, stylo 5.5 mm. longo albo-viridi, stigmate viridi.

Cult. Hort. Bot. Reg. Edin. Hab. Japan.

Easily recognised by the almost globose flowers. The pink colour of the corolla scarcely ever goes beyond the corolla lobes except in the veining of the tube.

Enkianthus Palibinii, Craib, sp. n.

Ramuli saepissime verticillati, juventute ad foliorum insertionem paucipilosi, aliter glabri, angulati, virides vel saepius plus minusve rubro-suffusi, elongati folia alterna vel subalterna, breves foliorum rosulam gerentes. Folia oblanceolata vel rarius obovato-oblanceolata, apice plus minusve distincte breviter acuminata, summo apice costa excurrente apiculata, basi attenuato-cuneata, usque ad 4 cm. longa et 1.9 cm. lata, rigide chartacea, supra viridia, sparse pilosa, subtus pallidiora, ad costam inferne sed praecipue in axillis parce pilosa, aliter glabra vel fere glabra, nervis lateralibus utrinque 4-6 intra marginem anastomosantibus, costa subtus prominente, margine argute arcte serrulata, serrulis in pilos mox deciduos productis; petioli ad 10 mm. longi, glabri vel fere glabri, supra anguste altius canaliculati, apicem versus lamina decurrente breviter alati. Inflorescentia terminalis, breviter racemosa, rhachi cum pedicellis sparse brunneo-pilosa praetereaquo albo-puberula; pedicelli inferiores ad 15 mm. longi. Calyx 4 mm. longus, segmentis lanceolatis summo apice breviter apiculatis 1.25 mm. latis indumento specierum aliarum tectis. Corolla circa 10 mm. longa, 7-9 mm. diametro, lobis rotundatis paululo reflexis dorso superne carinatis summo apice apiculatis. Stamina generis; filamenta ad 3 mm. longa; antherae 1.25 mm. longae, setulosae, aristis 1.25 mm. longis papillosis. Ovarium 2 mm. altum, cum stylo pallide viridi 5.5 mm. longo sulcato glabrum, stigmatibus viridi.—? *E. campanulatus* var. *Palibinii*, Bean, Trees and Shrubs, i, 512.

Cult. Hort. Bot. Reg. Edin. Hab. Japan.

Distinguished from its allies by the colour of corolla, which in the mature flower is red more or less throughout.

Enkianthus pallidiflorus, Craib, sp. n.

Ramuli saepissime verticillati, juventute nisi ad foliorum insertionem paucipilosi glabri, virides vel parum rubro-suffusi, angulati, elongati folia alterna, breves folia rosulatum aggregata gerentes. Folia lanceolata oblanceolatave, apice nervo mediano excurrente apiculata, basi longe cuneata, usque ad 4 cm. longa et 1.4 cm. lata, satis rigida, supra viridia, ad costam nervosque pilis erectis distanter instructa, subtus pallidiora, ad costam nervosque vel tantum ad costam et praecipue inferne et ibi in axillis sparse pilosa, pilis mox ferrugineis, nervis lateralibus utrinque 4-6 intra marginem anastomosantibus, costa subtus prominente, margine anguste arcte crenulato-serrulata, serrulis in pilos mox delapsos productis; petioli 7-12 mm. longi, supra conspicue canaliculati, apicem versus anguste alati, saepissime glabri. Racemi satis elongati, sessiles, ramulos breves termi-

nantes, rhachi 3-4 cm. longa, cum pedicellis sparse brunneo-pilosa et praeterea albo-puberula, pedicellis inferioribus circa 2 cm. longis. Calycis segmenta lanceolata, apicem versus attenuata, 2.75 mm. longa, 1.25 mm. lata, dorso parce brunneo-pilosa, intra albo-puberula, margine primo longius distanter ciliata, mox ciliolata tantum. Corolla usque ad 9 mm. longa, lobis dorso apicem versus carinatis summo apice apiculatis demum paululo reflexis. Stamina gregis; filamenta circa 2.5 mm. longa; antherae paulo ultra 1 mm. longae, setulosae, aristis 1.25 mm. longis papillois. Pistillum glabrum; ovarium 2 mm. altum, viride, stylo vix 5 mm. longo inferne sulcato, stigmate glabro.—? *E. nivalis*, Hort. ex Schneider Laubholz. ii, 521—nomen tantum.

Cult. Hort. Bot. Reg. Edin. Hab. Japan.

Distinguished by the corolla, which has a faint tinge of pink only here and there on the lobes, and by the distinctly racemose inflorescence.

***Enkianthus pendulus*, Craib, sp. n.**

Ramuli saepissime verticillati, juventute virides vel plus minusve rubro-suffusi, angulati, ad foliorum insertionem paucipilosi, aliter glabri, elongati folia alterna, breves folia rosulatum disposita gerentes. Folia lanceolata, ovato-lanceolata vel oblanceolata, apice plus minusve distincte acuminata, summo apice costa excurrente conspicue apiculata, basi cuneata, plerumque circa 30 mm. longa et 18 mm. lata, chartacea, supra viridia, subtus pallidiora, inferne ad costam sed praesertim in axillis parce pilosa, pilis mox ferrugineis, aliter glabra vel fere glabra, nervis lateralibus utrinque 4-6 intra marginem anastomosantibus, costa subtus prominente, margine arcte anguste serrulata, serrulis in pilos mox delapsos productis; petioli circa 1 cm. longi, supra conspicue canaliculati, superne anguste breviter alati, glabri vel fere glabri. Racemi sessiles, ramulos breves terminantes, penduli, conspicue elongati, rhachi 5-6 cm. longa, cum pedicellis 2-2.5 cm. longis parce brunneo-pilosa praetereaquo albo-puberula; bractae saepissime fugaces, parvae. Calycis segmenta lanceolata, apice attenuato-acuta, 3 mm. longa, 1.25 mm. lata, dorso sparse brunneo-pilosa, intra albo-puberula, margine primo longius ciliata mox ciliolata. Corolla 9 mm. longa, lobis dorso superne carinatis summo apice mucronatis demum tantum paululo reflexis. Stamina gregis; filamenta 1.75-2.25 mm. longa, antheris aristis subaequilongis circa 1 mm. longis, antheris breviter setulosis, aristis papillois. Pistillum glabrum; ovarium viride, 2 mm. altum, stylo pallidiora circa 4.5 mm. longo, stigmate viridi.

Cult. Hort. Bot. Reg. Edin. Hab. Japan.

Readily distinguished by the elongate pendulous racemes. The pink in the corolla is practically confined to the veins, there being but a very slight pink tinge in the lobes.

Enkianthus recurvus, Craib, sp. n.

Ramuli saepissime verticillati, juniores nisi ad foliorum insertionem paucipilosi glabri, rubescentes rarius omnino virides, angulati, breves folia rosulam efficientia, elongati folia parum majora alterna rarius subopposita gerentes. Folia oblanceolata vel late oblanceolata, subacuminata vel fere acuminata, summo apice costa excurrente apiculata, basi attenuato-cuneata, usque ad 5 cm. longa et 2.2 cm. lata, chartacea, supra viridia, ad costam nervos nervulosque sparse pilosa, subtus pallidiora saepissime nitida, latere utroque costae inferne pilosa, pilis satis longis mox ochrascentibus, aliter glabra, rarius pilis hic illic instructa, nervis lateralibus utrinque 5-6 intra marginem anastomosantibus pagina utraque conspicuis, costa subtus prominente, margine argute arcte serrulata, serrulis apice pilo mox evanido instructis fere semper haud imbricatis; petioli ad 12 mm. longi, supra conspicue anguste canaliculati, superne latere utroque anguste alati, glabri vel paucipilosi. Racemi terminales, sessiles, axi abbreviato, fasciculum fere spectantes, floribus inferioribus in axi foliorum rosulae superiorum ortis; bractee bracteolaeque fugaces; rhachis usque ad 3.5 cm. longa, cum pedicellis pilis brunneis transverse pluriseptatis satis longis instructis praeterea sparse albo-puberulis; pedicelli inferiores ad 2.3 cm. longi, superiores circa 1.2 cm. longi. Calyx 5 mm. longus, segmentis lanceolatis apice attenuato-acutis saepe recurvis 1.5-1.75 mm. latis dorso paucipilosis intra puberulis margine primo longe ciliatis demum pilis pro parte maxima delapsis ciliolatis tantum viridibus albo-marginatis. Corolla primo ambitu oblonga, mox lobis conspicue reflexis campanulata, 11-13 mm. longa, matura apice 10-11 mm. diametro, lobis 2.5-3 mm. longis rotundatis dorso superne carinatis summo apice breviter apiculatis. Antherae 1.5 mm. longae, sparse setulosae, suboblongae, superne parum ampliatae, apiculatae, aristis 1.25 mm. longis papillois; filamenta gregis, 3.25-3.5 mm. longa. Ovarium cum disco pallido 2.5 mm. altum, circa 2 mm. diametro, stylo 5.75 mm. longo inferne sulcato, stigmate viridi.

Cult. Hort. Bot. Reg. Edin. Hab. Japan.

Distinguished from its allies by the size of its flowers and by the conspicuously recurved corolla lobes of the mature flower. The pink of the corolla is usually restricted to the lobes and the veins of the tube, but not unfrequently the pink colour reaches as far as the middle of the tube. In habit this

species reminds one more of the *deflexus* than the *campanulatus* series.

Enkianthus sinohimalaicus, Craib, sp. n.

Ramuli elongati nisi ad foliorum insertiones glabri vel fere glabri; folia alterna vel subalterna gerentes, angulati, breves folia rosulatum disposita gerentes. Folia lanceolata lateve lanceolata, apice juventute longe apiculata, basi cuneata, rarius late cuneata vel fere acuminata, circa 5 cm. longa et 2 cm. lata, supra viridia, ad costam nervosque pilis paucis brevibus instructa praetereaque inferne secus costam albo-puberula, subtus pallidiora, glabra vel fere glabra, chartacea, nervis lateralibus utrinque circa 6 intra marginem anastomosantibus supra parum impressis subtus prominulis, costa supra impressa subtus prominente, margine arcte anguste crenulato-serrata, petiolo usque ad 1 cm. longo supra canaliculato lamina decurrente alato puberulo suffulta. Flores in racemos abbreviatis corymbiformes dispositi, bracteis infimis foliaceis; pedicelli ad 3 cm. longi, superne paulo incrassati, cum rhachi pilis paucis brunneis longioribus instructi praetereaque albo-puberuli; alabastra oblongo-obovata, ante anthesin distincte longiora quam latiora. Calycis segmenta plus minusve deltoidea, obtusa, circa 2 mm. longa et lata, albo-marginata, ciliolata. Corolla 1 cm. longa, lobis dorso haud carinatis et haud apiculatis papilloso-ciliolatis. Stamina generis; filamenta 3–3.5 mm. longa, antheris 1.5 mm. longis setulosis, aristis circa 1 mm. longis brevibus setulosis. Ovarium cum disco circa 2 mm. altum, puberulum, stylo 5 mm. longo pallido pilis subrigidis divaricatis inferne instructo, stigmatibus viridi.

Cult. Hort. Bot. Reg. Edin. Hab. Szechwan.

Raised from Wilson's Chinese seed received as *E. deflexus*. In flower this species resembles very closely *E. himalaicus*, from which it may be distinguished by the almost glabrous lower leaf surface, as also by the finer and sharper lateral nerves as seen on the lower surface. This species and *E. himalaicus* may be distinguished from *E. sulcatus* by their flower buds, which are longer than broad, and in which the grooves alternating with the corolla lobes run about half-way down to the calyx tip. In *E. sulcatus* the flower bud just before expansion is broader than long, and the grooves run right down to the calyx tips.

Enkianthus sulcatus, Craib, sp. n.

Ramuli elongati folia alterna vel subalterna gerentes, angulati, nisi ad foliorum insertionem glabri vel fere glabri, breves folia in rosulam disposita gerentes. Folia lanceolata vel latius

oblongo-lanceolata, apice longius mucronato-acuminata, basi cuneata vel rotundato-cuneata, decurrentia, ad 6 cm. longa, 3 cm. lata, rigide chartacea, supra viridia, demum rubescentia, primo pilis sat robustis rectis densius instructa, pilis cito apice brunnescentibus demum basibus tantum persistentibus praeterea-que plus minusve inconspicue albo-puberula, subtus pallidiora, ad costae nervorumque lateralium inferiorum partes basales pilis rigidis albis apice mox brunnescentibus subdense instructa, aliter pilis brevioribus ferrugineis adpressis sparse tecta, nervis lateralibus utrinque 6-8 cum costa supra plus minusve impressis subtus prominentibus intra marginem anastomosantibus margine argute serrulata, petiolo ad 1 cm. longo puberulo supra canaliculato lamina decurrente alato suffulta. Racemi abbreviati, bracteis inferioribus foliaceis, pedicellis circa 3 cm. longis superne incrassatis cum rhachi pilis longis brunneis sparse instructis praeterea-que albo-puberulis; alabastra depresso-globosa vel late ovata, ante anthesin latiora quam longiora, 5-sulcata, sulcis calycis apicem attingentibus. Calycis segmenta parum variabilia, 4-4.5 mm. longa, 1.5-2.5 mm. lata, lanceolata vel ovato-lanceolata, apice longe attenuata acuminatave, mucronulata, dorso pilis paucis longiusculis adpressis instructa vel fere glabra, intra superne puberula, conspicue albo-marginata, ciliolata. Corolla 1 cm. longa, basi fere truncata, circa 1 cm. diametro, lobis papilloso-ciliolatis saepissime breviter apiculatis. Stamina generis; filamenta 2.5-3 mm. longa, basi expansa pilosa, superne brevius papilloso-setulosa, antheris circa 1.75 mm. longis setulosis, aristis 1.25-1.5 mm. longis papilloso-puberulis. Ovarium 3 mm. altum, viride, basi pallidum, puberulum nisi apice breviter pilosum; stylus 4.5 mm. longus, pallidus, pilis divaricatis basem prope ornatus, superne glaber, stigmatum viridi.

Cult. Hort. Bot. Reg. Edin. et Caerhys. Hab. Szechwan.

Raised from Wilson's seed, this species must be included in the *Plantae Wilsonianae* under the name *E. deflexus*. The character drawn from the flower bud readily distinguishes the plant from the Himalayan species.

Enkianthus tectus, Craib, sp. n.

Ramuli saepissime verticillati, juventute plus minusve rubro-suffusi, ad foliorum insertionem paucipilosi, aliter glabri, angulati, elongati folia alterna rarius subopposita, breves foliorum rosulam gerentes. Folia quoad formam parum variabilia plerumque oblanceolata vel obovato-oblanceolata vel rarius fere obovata, apice acuminata, summo apice costa excurrente apiculata, basi cuneata angustave cuneata, saepissime circa 2.5-3 cm. longa et 1-1.6 cm. lata, satis rigida, supra ad costam

nervosque pilis erectis plus minusve sparse instructa, subtus nitida, pallidiora, inferne ad costam nervosque laterales vel tantum ad costam sed praecipue in axillis parce pilosa, nervis lateralibus utrinque 4-6 intra marginem anastomosantibus, costa subtus prominente, margine argute anguste crenulato-serrulata, serrulis apice in pilos mox deciduis productis saepissime imbricatis; petioli ad 7 mm. longi, supra conspicue canaliculati, apicem versus breviter anguste alati, fere semper omnino glabri. Racemi sessiles, abbreviati, ramulos breves terminantes, rhachi 2-2.5 cm. longa, pedicellis 7-15 mm. longis cum rhachi parce brunneo-pilosis praeterea albe albo-puberulis; bractee bracteolaeque parvae. Calycis segmenta lanceolata, 3 mm. longa, 1.25 mm. lata, primo longius distanter ciliata, mox pilis deciduis ciliolata, intra albo-puberula. Corolla circa 9 mm. longa, lobis rotundatis haud raro breviter apiculatis cito paulo reflexis. Stamina gregis; filamenta 2.5-2.75 mm. longa; antherae vix 1 mm. longae, superne ampliatae, cum aristas circa 1 mm. longis papilloso-puberulis. Pistillum glabrum; ovarium 1.75 mm. altum, 1.5 mm. diametro, viride, stylo 5 mm. longo pallide viridi inferne sulcato, stigmatibus viridi.

Cult. Hort. Bot. Reg. Edin. Hab. Japan.

The short dense flowered fascicle-like racemes overspread by the leaves characterise this plant. The pink colour of the corolla is confined to the lobes and the veining of the tube.